



# Public Service Commission of Wisconsin

Eric Callisto, Chairperson  
Mark Meyer, Commissioner  
Lauren Azar, Commissioner

610 North Whitney Way  
P.O. Box 7854  
Madison, WI 53707-7854

Public Service Commission of Wisconsin  
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June 11, 2010 – VIA E-MAIL

Mr. James Grassman, Village Manager  
Village of Whitefish Bay Water Utility  
5300 North Marlborough Lane  
Whitefish Bay, WI 53217  
E-mail: [J.Grassman@wfbvillage.org](mailto:J.Grassman@wfbvillage.org)

Re: Application to Increase Water Rates

6480-WR-105

Dear Mr. Grassman:

The Public Service Commission (Commission) staff has analyzed your application for a water rate increase. The application was received on January 8, 2010. A proposed staff exhibit has been prepared, a copy of which is enclosed. The exhibit contains schedules showing staff's cost-of-service analysis and proposed rates.

We intend to submit our proposal at the public hearing on July 14, 2010. At least one person must represent your utility at the hearing.

We have used a 3.25 percent rate of return on the estimated water utility net investment rate base for the test year 2010, as recommended by our staff auditor. The proposed rates would increase annual revenues from water public utility service by an estimated \$428,377, of which \$359,418 would be from general service customers and \$68,959 would be from the public fire protection charges.

The increase in water utility revenues results because of a 64 percent increase in gross plant investment and a 35 percent increase in operating expenses since your last full water rate case in 2005. The rates authorized in your last full rate case were adjusted for inflation through the Simplified Rate Case (SRC) process in 2009.

We have selected some customers for comparison of proposed and present rates (see Schedule 11 of enclosed staff exhibit).

Our proposed charges for public fire protection provide an increase of approximately 31 percent compared to a 40 percent increase in general service rates. The larger percentage increase in general service charges results because a greater proportion of the annual operating costs is allocated to general service than was allocated at the time of your last rate proceeding. This is based on current ratios of maximum general service demand to available fire protection capacity. We believe the larger percentage increase in the general service charges is reasonable in that it reflects the cost of providing service.

Mr. James Grassman  
Docket 6480-WR-105  
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We are recommending to the Commission that your water utility's filed rules and regulations be updated to reflect the latest requirements in Wis. Admin. Code ch. PSC 185. A copy is enclosed.

The proposed staff exhibit is intended to give the Commission the staff's viewpoint and is in no way absolute. The utility has the prerogative to present its own case. It may be advantageous to the utility to submit additional information which is believed to be pertinent to substantiate its position. Please note that the Commission will base its decision on the merits of the case.

If you have any questions, please e-mail me at [David.Prochaska@psc.state.wi.us](mailto:David.Prochaska@psc.state.wi.us) or call me at (608) 266-5739.

Sincerely,

*/s/ David L. Prochaska*

David L. Prochaska  
Public Utility Rate Analyst  
Division of Water, Compliance and Consumer Affairs

DLP:w:\exhibit\letters\6480-WR-105

Enclosures

cc: Ms. Barbara C. Patin, Village Clerk-Treasurer, E-mail: [B.Patin@wfbvillage.org](mailto:B.Patin@wfbvillage.org)  
Mr. Donald N. Vilione, CPA, Baker Tilly Virchow Krause, E-mail: [Donald.Vilione@bakertilly.com](mailto:Donald.Vilione@bakertilly.com)

Docket No. 6480-WR-105  
Witness: David L. Prochaska  
Exhibit No. \_\_\_\_\_

**VILLAGE OF WHITEFISH BAY WATER UTILITY**

	<u>Schedule</u>
System Demand Ratios	1
Allocation of Utility Financed Plant to Service Cost Functions	2
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SYSTEM DEMAND RATIOS

MAXIMUM DAY SYSTEM DEMAND

TOTAL ANNUAL PUMPAGE 462,240,000 GALLONS

AVERAGE DAILY PUMPAGE 1,266,411 GALLONS

MAXIMUM DAY PUMPAGE 2,406,181 GALLONS

FIRE FLOW:  
GAL/MIN: 3,500  
DURATION (HOURS): 3 630,000 GALLONS

AVERAGE DAY PLUS FIRE FLOW 1,896,411 GALLONS

RATIO: BASE:  $\frac{1,266,411}{2,406,181} = 52.63 \%$

MAX DAY: 100-BASE = 47.37 %

MAXIMUM HOUR SYSTEM DEMAND

AVERAGE HOUR ON MAX DAY 100,258 GALLONS

MAXIMUM HOUR PUMPAGE 150,386 GALLONS

AVERAGE HOUR PLUS ONE HOUR FIRE FLOW 262,767 GALLONS

RATIO: BASE:  $\frac{1,266,411}{6,306,411} = 20.08 \%$  Use 20.08 %

MAX HOUR : 100-BASE = 79.92 % Use 79.92 %

**ALLOCATION OF UTILITY FINANCED PLANT  
TO  
SERVICE COST FUNCTIONS**

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	BASE COST (\$)	MAX DAY (\$)	EXTRA-CAPACITY MAX HOUR		CUSTOMER COSTS			FIRE PROTECT. (\$)
					STORAGE (\$)	DISTRIB. (\$)	BILLING (\$)	EQUIV. METER (\$)	EQUIV. SERVICE (\$)	
	<b>INTANGIBLES</b>									
301-3	All intangibles	0	0	0	0	0	0	0	0	0
	<b>SOURCE OF SUPPLY</b>									
310	Land and land rights	0	0	0						
311	Structures and improvements	0	0	0						
312	Collecting and impounding reservoirs	0	0	0						
313	Lake, river, and other intakes	196,666	103,508	93,158						
314	Wells and springs	0	0	0						
316	Supply mains	148,559	78,189	70,370						
	<b>PUMPING PLANT</b>									
320	Land and land rights	9,156	4,819	4,337						
321	Structures and improvements	431,469	227,089	204,380						
323	Other power production equipment	23,943	12,602	11,341						
325	Electric pumping equipment	547,315	288,061	259,254						
326	Diesel pumping equipment	0	0	0						
328	Other pumping equipment	12,554	6,607	5,947						
	<b>WATER TREATMENT PLANT</b>									
330	Land and land rights	30,854	16,239	14,615						
331	Structures and improvements	507,736	267,229	240,507						
332	Water treatment equipment	2,351,570	1,237,668	1,113,902						
	<b>TRANSMISSION AND DISTRIBUTION PLANT</b>									
340	Land and land rights	4,074	567	167	71	1,447	0	443	862	517
341	Structures and improvements	0	0	0	0	0	0	0	0	0
342	Distribution reservoirs and standpipes	194,190	38,996		155,194					
343	Transmission and distribution mains	4,707,849	1,194,668	362,747		3,150,433				
344	Fire mains	0								0
345	Services	1,876,373							1,876,373	
346	Meters	963,628						963,628		
348	Hydrants	1,125,606								1,125,606
349	Other transmission and distribution plant	19,706	2,741	806	345	7,001	0	2,141	4,170	2,501
	<b>GENERAL PLANT</b>									
389	Land and land rights	0	0	0	0	0	0	0	0	0
390	Structures and improvements	22,097	5,845	4,001	261	5,308	0	1,623	3,161	1,896
391	Office furniture and equipment	12,250	3,241	2,218	145	2,942	0	900	1,752	1,051
391.1	Computers	28,341	7,497	5,132	335	6,807	0	2,082	4,054	2,432
392	Transportation equipment	76,927	20,350	13,931	910	18,478	0	5,652	11,005	6,602
393	Stores equipment	60	16	11	1	14	0	4	9	5
394	Tools, shop, and garage equipment	91,818	24,289	16,627	1,086	22,054	0	6,746	13,135	7,880
395	Laboratory equipment	17,399	4,603	3,151	206	4,179	0	1,278	2,489	1,493
396	Power-operated equipment	0	0	0	0	0	0	0	0	0
397	Communication equipment	212,755	56,281	38,527	2,517	51,103	0	15,631	30,437	18,258
398	Miscellaneous equipment	2,492	659	451	29	599	0	183	357	214
399	Other tangible property	0	0	0	0	0	0	0	0	0
	<b>TOTAL</b>	<b>13,615,387</b>	<b>3,601,766</b>	<b>2,465,580</b>	<b>161,102</b>	<b>3,270,366</b>	<b>0</b>	<b>1,000,312</b>	<b>1,947,804</b>	<b>1,168,456</b>

**ALLOCATION OF TOTAL PLANT  
TO  
SERVICE COST FUNCTIONS**

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	BASE COST (\$)	MAX DAY (\$)	EXTRA-CAPACITY MAX HOUR		BILLING (\$)	CUSTOMER COSTS		FIRE PROTECT. (\$)
					STORAGE (\$)	DISTRIB. (\$)		EQUIV. METER (\$)	EQUIV. SERVICE (\$)	
	<b>INTANGIBLES</b>									
301-3	All intangibles	0	0	0	0	0	0	0	0	0
	<b>SOURCE OF SUPPLY</b>									
310	Land and land rights	0	0	0						
311	Structures and improvements	0	0	0						
312	Collecting and impounding reservoirs	0	0	0						
313	Lake, river, and other intakes	196,666	103,508	93,158						
314	Wells and springs	0	0	0						
316	Supply mains	148,559	78,189	70,370						
	<b>PUMPING PLANT</b>									
320	Land and land rights	9,156	4,819	4,337						
321	Structures and improvements	431,469	227,089	204,380						
323	Other power production equipment	23,943	12,602	11,341						
325	Electric pumping equipment	547,315	288,061	259,254						
326	Diesel pumping equipment	0	0	0						
328	Other pumping equipment	12,554	6,607	5,947						
	<b>WATER TREATMENT PLANT</b>									
330	Land and land rights	30,854	16,239	14,615						
331	Structures and improvements	507,736	267,229	240,507						
332	Water treatment equipment	2,351,570	1,237,668	1,113,902						
	<b>TRANSMISSION AND DISTRIBUTION PLANT</b>									
340	Land and land rights	4,074	570	168	66	1,458	0	410	857	545
341	Structures and improvements	0	0	0	0	0	0	0	0	0
342	Distribution reservoirs and standpipes	194,190	38,996		155,194					
343	Transmission and distribution mains	5,127,634	1,301,193	395,092		3,431,348				
344	Fire mains	0								0
345	Services	2,017,214							2,017,214	
346	Meters	963,628						963,628		
348	Hydrants	1,283,049								1,283,049
349	Other transmission and distribution plant	19,706	2,755	812	319	7,054	0	1,981	4,147	2,638
	<b>GENERAL PLANT</b>									
389	Land and land rights	0	0	0	0	0	0	0	0	0
390	Structures and improvements	22,097	5,713	3,846	248	5,480	0	1,539	3,222	2,049
391	Office furniture and equipment	12,250	3,167	2,132	137	3,038	0	853	1,786	1,136
391.1	Computers	28,341	7,327	4,933	318	7,029	0	1,974	4,132	2,628
392	Transportation equipment	76,927	19,887	13,389	863	19,079	0	5,358	11,216	7,134
393	Stores equipment	60	16	10	1	15	0	4	9	6
394	Tools, shop, and garage equipment	91,818	23,737	15,980	1,030	22,773	0	6,395	13,388	8,515
395	Laboratory equipment	17,399	4,498	3,028	195	4,315	0	1,212	2,537	1,614
396	Power-operated equipment	0	0	0	0	0	0	0	0	0
397	Communication equipment	212,755	55,002	37,029	2,387	52,767	0	14,819	31,021	19,731
398	Miscellaneous equipment	2,492	644	434	28	618	0	174	363	231
399	Other tangible property	0	0	0	0	0	0	0	0	0
	<b>TOTAL</b>	<b>14,333,456</b>	<b>3,705,516</b>	<b>2,494,664</b>	<b>160,786</b>	<b>3,554,976</b>	<b>0</b>	<b>998,347</b>	<b>2,089,892</b>	<b>1,329,276</b>

**ALLOCATION OF DEPRECIATION EXPENSE  
TO  
SERVICE COST FUNCTIONS**

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	BASE COST (\$)	MAX DAY (\$)	EXTRA-CAPACITY MAX HOUR		BILLING (\$)	CUSTOMER COSTS		FIRE PROTECT. (\$)
					STORAGE (\$)	DISTRIB. (\$)		EQUIV. METER (\$)	EQUIV. SERVICE (\$)	
	<b>INTANGIBLES</b>									
301-3	All intangibles	0	0	0	0	0	0	0	0	0
	<b>SOURCE OF SUPPLY</b>									
310	Land and land rights	0	0	0						
311	Structures and improvements	0	0	0						
312	Collecting and impounding reservoirs	0	0	0						
313	Lake, river, and other intakes	3,343	1,759	1,584						
314	Wells and springs	0	0	0						
316	Supply mains	2,674	1,407	1,267						
	<b>PUMPING PLANT</b>									
320	Land and land rights	0	0	0						
321	Structures and improvements	13,807	7,267	6,540						
323	Other power production equipment	0	0	0						
325	Electric pumping equipment	24,082	12,675	11,407						
326	Diesel pumping equipment	0	0	0						
328	Other pumping equipment	552	291	261						
	<b>WATER TREATMENT PLANT</b>									
330	Land and land rights	0	0	0						
331	Structures and improvements	16,248	8,552	7,696						
332	Water treatment equipment	77,602	40,843	36,759						
	<b>TRANSMISSION AND DISTRIBUTION PLANT</b>									
340	Land and land rights	0	0	0	0	0	0	0	0	0
341	Structures and improvements	0	0	0	0	0	0	0	0	0
342	Distribution reservoirs and standpipes	0	0		0					
343	Transmission and distribution mains	61,202	15,531	4,716		40,956				
344	Fire mains	0								0
345	Services	54,415							54,415	
346	Meters	26,500						26,500		
348	Hydrants	24,763								24,763
349	Other transmission and distribution plant	985	92	28	0	242	0	156	321	146
	<b>GENERAL PLANT</b>									
389	Land and land rights	0	0	0	0	0	0	0	0	0
390	Structures and improvements	641	185	147	0	86	0	56	115	52
391	Office furniture and equipment	0	0	0	0	0	0	0	0	0
391.1	Computers	7,567	2,185	1,736	0	1,018	0	659	1,353	616
392	Transportation equipment	10,231	2,954	2,348	0	1,377	0	891	1,829	832
393	Stores equipment	0	0	0	0	0	0	0	0	0
394	Tools, shop, and garage equipment	5,325	1,538	1,222	0	717	0	464	952	433
395	Laboratory equipment	1,009	291	232	0	136	0	88	180	82
396	Power-operated equipment	0	0	0	0	0	0	0	0	0
397	Communication equipment	24,151	6,974	5,542	0	3,250	0	2,103	4,318	1,965
398	Miscellaneous equipment	145	42	33	0	20	0	13	26	12
399	Other tangible property	0	0	0	0	0	0	0	0	0
	<b>TOTAL</b>	<b>355,242</b>	<b>102,586</b>	<b>81,518</b>	<b>0</b>	<b>47,800</b>	<b>0</b>	<b>30,929</b>	<b>63,509</b>	<b>28,901</b>

**ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES  
TO  
SERVICE COST FUNCTIONS**

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	BASE COST (\$)	MAX DAY (\$)	EXTRA-CAPACITY		CUSTOMER COSTS			FIRE PROTECT. (\$)
					STORAGE (\$)	DISTRIB. (\$)	BILLING (\$)	EQUIV. METER (\$)	EQUIV. SERVICE (\$)	
SOURCE OF SUPPLY EXPENSES										
600	Operation supervision and engineering	0	0	0						
601	Operation labor and expenses	0	0	0						
602	Purchased water	456,900	456,900							
603	Miscellaneous expenses	0	0	0						
604	Rents	0	0	0						
610	Maint. supervision and engineering	0	0	0						
611	Maint. of structures and improvements	0	0	0						
612	Maint. of collect. and impounding reservoirs	0	0	0						
613	Maint. of lake, river and other intakes	0	0	0						
614	Maint. of wells and springs	0	0	0						
615	Maint. of infiltration galleries and tunnels	0	0	0						
616	Maint. of supply mains	0	0	0						
617	Maint. of miscellaneous water source plant	0	0	0						
PUMPING EXPENSES										
620	Operation supervision and engineering	0	0	0						
621	Fuel for power production	0	0							
622	Power production labor and expenses	0	0							
623	Fuel or power purchased for pumping	0	0							
624	Pumping labor and expenses	0	0	0						
625	Expenses transferred - cr.	0	0	0						
626	Miscellaneous expenses	0	0	0						
627	Rents	0	0	0						
630	Maint. supervision and engineering	0	0	0						
631	Maint. of structures and improvements	0	0	0						
632	Maint. of power production equipment	0	0	0						
633	Maint. of pumping equipment	0	0	0						
WATER TREATMENT EXPENSES										
640	Operation supervision and engineering	0	0	0						
641	Chemicals	0	0							
642	Operation labor and expenses	0	0	0						
643	Miscellaneous expenses	0	0	0						
644	Rents	0	0	0						
650	Maint. supervision and engineering	0	0	0						
651	Maint. of structures and improvements	0	0	0						
652	Maint. of water treatment equipment	0	0	0						



**ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES  
TO  
SERVICE COST FUNCTIONS**

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL (\$)	BASE COST (\$)	MAX DAY (\$)	EXTRA-CAPACITY MAX HOUR		CUSTOMER COSTS			FIRE PROTECT. (\$)
					STORAGE (\$)	DISTRIB. (\$)	BILLING (\$)	EQUIV. METER (\$)	EQUIV. SERVICE (\$)	
TRANSMISSION AND DISTRIBUTION EXPENSES										
660	Operation supervision and engineering	0	0	0	0	0	0	0	0	0
661	Storage facilities expenses	6,000	1,205		4,795					
662	Transmission and distribution lines expenses	0	0	0		0				
663	Meter expenses	12,000						12,000		
664	Customer installations expenses	0							0	
665	Miscellaneous expenses	8,000	896	191	1,057	1,662	0	635	2,866	693
666	Rents	0	0	0	0	0	0	0	0	0
670	Maint. supervision and engineering	0	0	0	0	0	0	0	0	0
671	Maint. of structures and improvements	0	0	0	0	0	0	0	0	0
672	Maint. of distr. reservoirs and standpipes	21,700	4,358		17,342					
673	Maint. of transmission and distribution mains	52,000	13,196	4,007		34,798				
674	Maint. of fire mains	0								0
675	Maint. of services	60,000							60,000	
676	Maint. of meters	1,300						1,300		
677	Maint. of hydrants	14,500								14,500
678	Maint. of miscellaneous plant	0	0	0	0	0	0	0	0	0
CUSTOMER ACCOUNTS EXPENSES										
901	Supervision	1,800					1,800			
902	Meter reading expenses	21,000					21,000			
903	Customer records and collection expenses	2,500					2,500			
904	Uncollectible accounts	0					0			
905	Miscellaneous customer accounts expenses	0					0			
SALES EXPENSES										
910	Sales expenses	0					0			
ADMINISTRATIVE AND GENERAL EXPENSES										
920	Administrative and general salaries	121,165	11,859	2,533	13,996	22,000	15,266	8,409	37,934	9,167
921	Office supplies and expenses	600	59	13	69	109	76	42	188	45
922	Administrative expenses transferred - cr.	0	0	0	0	0	0	0	0	0
923	Outside services employed	19,800	1,938	414	2,287	3,595	2,495	1,374	6,199	1,498
924	Property insurance	3,000	776	522	34	744	0	209	437	278
925	Injuries and damages	8,500	832	178	982	1,543	1,071	590	2,661	643
926	Employee pensions and benefits	86,200	8,437	1,802	9,957	15,652	10,861	5,982	26,987	6,522
928	Regulatory commission expenses	2,000	196	42	231	363	252	139	626	151
929	Duplicate charges - cr.	0	0	0	0	0	0	0	0	0
930	Miscellaneous general expenses	700	69	15	81	127	88	49	219	53
931	Rents	0	0	0	0	0	0	0	0	0
932	Maintenance of general plant	0	0	0	0	0	0	0	0	0
TOTAL		899,665	500,719	9,716	50,832	80,593	55,409	30,728	138,117	33,551

**SUMMARY OF ALLOCATION OF OPERATING COSTS TO SERVICE COST FUNCTIONS**

<u>OPERATING COST</u>	<u>EXTRA-CAPACITY</u>					<u>CUSTOMER COSTS</u>			
	<u>TOTAL</u> (\$)	<u>BASE</u> <u>COST</u> (\$)	<u>MAX</u> <u>DAY</u> (\$)	<u>MAX HOUR</u> <u>STORAGE</u> (\$)	<u>DISTRIB.</u> (\$)	<u>BILLING</u> (\$)	<u>EQUIV.</u> <u>METER</u> (\$)	<u>EQUIV.</u> <u>SERVICE</u> (\$)	<u>FIRE</u> <u>PROTECT.</u> (\$)
OPERATION AND MAINTENANCE	899,665	500,719	9,716	50,832	80,593	55,409	30,728	138,117	33,551
DEPRECIATION EXPENSE	355,242	102,586	81,518	0	47,800	0	30,929	63,509	28,901
TAXES AND TAX EQUIVALENT	188,699	48,783	32,842	2,117	46,801	0	13,143	27,513	17,500
RETURN ON NET INVEST. RATE BASE	320,985	84,912	58,126	3,798	77,099	0	23,583	45,920	27,547
<b>TOTAL</b>	<b>1,764,591</b>	<b>737,000</b>	<b>182,202</b>	<b>56,746</b>	<b>252,294</b>	<b>55,409</b>	<b>98,382</b>	<b>275,059</b>	<b>107,498</b>

**CUSTOMER CLASS DEMAND RATIOS**

<u>CUSTOMER CLASS</u>	<u>BASE COSTS</u>			<u>EXTRA-CAPACITY MAX. DAY DEMAND</u>				<u>EXTRA-CAPACITY MAX. HOUR DEMAND</u>				
	ANNUAL VOLUME 100 CU. FT.	AVERAGE DAY VOLUME (CU. FT.)	PERCENT (%)	EXTRA CAPACITY RATIO	VOLUME RATE CU. FT. PER DAY	PERCENT (%)	ADJUST. PERCENT (%)	EXTRA CAPACITY RATIO	VOLUME RATE CU. FT. PER HOUR	PERCENT (%)	STORAGE ADJUST. PERCENT (%)	DISTR. ADJUST. PERCENT (%)
RESIDENTIAL	445,484	122,050	81.53	2.50	305,126	68.08	68.08	5.50	27,970	45.89	45.89	45.89
COMMERCIAL	85,568	23,443	15.66	2.25	52,747	11.77	11.77	4.50	4,396	7.21	7.21	7.21
INDUSTRIAL	0	0	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
PUBLIC AUTHORITY	9,917	2,717	1.81	2.25	6,113	1.36	1.36	4.50	509	0.84	0.84	0.84
PUBLIC FIRE PROTECTION	5,464	1,497	1.00		84,225	18.79	18.79		28,075	46.06	46.06	46.06
TOTALS	546,433	149,708	100.00		448,211	100.00	100.00		60,950	100.00	100.00	100.00

50.00 <-- Public Fire % Limits --> 80.00 50.00

MAX.-DAY DEMAND = 512,197 (CUBIC FEET/DAY) SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM DAY EXTRA CAPACITY DEMAND

MAX.-HOUR DEMAND = 39,050 (CUBIC FEET/DAY) SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM HOUR EXTRA CAPACITY DEMAND

1.59 = NON-COINCIDENT / COINCIDENT RATIO FOR MAX DAY

1.94 = NON-COINCIDENT / COINCIDENT RATIO FOR MAX HOUR

**CUSTOMER CLASS ALLOCATION FACTORS**

<b><u>NUMBER OF METERS</u></b>														<b>TOTAL</b>	
<b><u>Meter size (inches):</u></b>	<b>5/8</b>	<b>3/4</b>	<b>1</b>	<b>1-1/4</b>	<b>1-1/2</b>	<b>2</b>	<b>2-1/2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b><u>METERS</u></b>	<b><u>PERCENT</u></b>
RESIDENTIAL	1,252	3,233	130	0	20	27	0	2	0	0	0	0	0	4,664	97.29
COMMERCIAL	3	32	14	0	13	51	0	3	3	0	0	0	0	119	2.48
INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
PUBLIC AUTHORITY	0	0	1	0	2	3	0	1	4	0	0	0	0	11	0.23
<b>TOTALS</b>	<b>1,255</b>	<b>3,265</b>	<b>145</b>	<b>0</b>	<b>35</b>	<b>81</b>	<b>0</b>	<b>6</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,794</b>	<b>100.00</b>

<b><u>EQUIVALENT METERS</u></b>														<b>TOTAL</b>	
<b>Allocation factor:</b>														<b>EQUIV.</b>	
<b>Meter size (inches):</b>	<b>5/8</b>	<b>3/4</b>	<b>1</b>	<b>1-1/4</b>	<b>1-1/2</b>	<b>2</b>	<b>2-1/2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b><u>METERS</u></b>	<b><u>PERCENT</u></b>
<b><u>Equiv. meter ratio:</u></b>	<b>1.0</b>	<b>1.0</b>	<b>2.5</b>	<b>3.7</b>	<b>5.0</b>	<b>8.0</b>	<b>12.5</b>	<b>15.0</b>	<b>25.0</b>	<b>50.0</b>	<b>80.0</b>	<b>120.0</b>	<b>160.0</b>		
RESIDENTIAL	1,252	3,233	325	0	100	216	0	30	0	0	0	0	0	5,156	86.36
COMMERCIAL	3	32	35	0	65	408	0	45	75	0	0	0	0	663	11.10
INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
PUBLIC AUTHORITY	0	0	3	0	10	24	0	15	100	0	0	0	0	152	2.54
<b>TOTALS</b>	<b>1,255</b>	<b>3,265</b>	<b>363</b>	<b>0</b>	<b>175</b>	<b>648</b>	<b>0</b>	<b>90</b>	<b>175</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,971</b>	<b>100.00</b>

<b><u>EQUIVALENT SERVICES</u></b>														<b>TOTAL</b>	
<b>Allocation factor:</b>														<b>EQUIV.</b>	
<b>Meter size (inches):</b>	<b>5/8</b>	<b>3/4</b>	<b>1</b>	<b>1-1/4</b>	<b>1-1/2</b>	<b>2</b>	<b>2-1/2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b><u>SERVICES</u></b>	<b><u>PERCENT</u></b>
<b><u>Equiv. service ratio:</u></b>	<b>1.0</b>	<b>1.0</b>	<b>1.3</b>	<b>1.7</b>	<b>2.0</b>	<b>3.0</b>	<b>3.5</b>	<b>4.0</b>	<b>5.0</b>	<b>6.0</b>	<b>7.0</b>	<b>8.0</b>	<b>9.0</b>		
RESIDENTIAL	1,252	3,233	169	0	40	81	0	8	0	0	0	0	0	4,783	94.14
COMMERCIAL	3	32	18	0	26	153	0	12	15	0	0	0	0	259	5.10
INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
PUBLIC AUTHORITY	0	0	1	0	4	9	0	4	20	0	0	0	0	38	0.75
<b>TOTALS</b>	<b>1,255</b>	<b>3,265</b>	<b>189</b>	<b>0</b>	<b>70</b>	<b>243</b>	<b>0</b>	<b>24</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,081</b>	<b>100.00</b>

**ALLOCATION OF SERVICE COST FUNCTIONS TO CUSTOMER CLASSES**

	<b>TOTAL</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>INDUSTRIAL</b>	<b>PUBLIC AUTHORITY</b>	<b>PUBLIC FIRE PROTECTION</b>
	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>
<b>BASE COSTS</b>	737,000	600,845	115,410	0	13,376	7,370
<b>EXTRA-CAPACITY COSTS:</b>						
<b>MAX.-DAY</b>	182,202	124,037	21,442	0	2,485	34,238
<b>MAX.-HOUR STORAGE</b>	56,746	26,041	4,092	0	474	26,139
<b>MAX.-HOUR DISTRIBUTION</b>	252,294	115,778	18,195	0	2,109	116,212
<b>CUSTOMER COSTS:</b>						
<b>BILLING</b>	55,409	53,906	1,375	0	127	
<b>EQUIVALENT METERS</b>	98,382	84,961	10,925	0	2,496	
<b>EQUIVALENT SERVICES</b>	275,059	258,952	14,033	0	2,074	
<b>FIRE PROTECTION</b>	107,498					107,498
<b>TOTAL COST</b>	1,764,591	1,264,519	185,473	0	23,141	291,458
<b>LESS OTHER REVENUE</b>	215,968	185,384	27,191	0	3,393	0
<b>COST OF SERVICE</b>	1,548,623	1,079,135	158,282	0	19,748	291,458
<b>REVENUE AT PRESENT RATES</b>	1,120,246	764,772	118,068	0	14,907	222,499
<b>DIFFERENCE</b>	428,377	314,363	40,214	0	4,841	68,959
<b>PERCENT INCREASE/DECREASE</b>	38.24	41.11	34.06	N/A	32.48	30.99

# VILLAGE OF WHITEFISH BAY WATER UTILITY

## Comparison of Revenue

at

## Present Rates, Cost of Service and Proposed Rates

Customer Class	Revenue at Present Rates	Cost of Service		Proposed Rates		
		Revenue Required	Increase Over Present Rates	Revenue	Increase Over Present Rates	Percent of Cost of Service
Residential	\$ 764,772	\$ 1,079,135	41%	\$ 1,070,950	40%	99%
Commercial	118,068	158,282	34%	165,550	40%	105%
Industrial	0	0		0		
Public Authority	14,907	19,748	32%	20,797	40%	105%
Public Fire Protection	222,499	291,458	31%	291,542	31%	100%
<b>Total</b>	<u><u>\$ 1,120,246</u></u>	<u><u>\$ 1,548,623</u></u>	<u><u>38%</u></u>	<u><u>\$ 1,548,839</u></u>	<u><u>38%</u></u>	<u><u>100%</u></u>

## VILLAGE OF WHITEFISH BAY WATER UTILITY

### Proposed Water Rates and Rules

#### Public Fire Protection Service - - - Fd-1

Under Wis. Stat. § 196.03(3)(b), the municipality has chosen to have the utility bill the retail general service customers for public fire protection service.

This service shall include the use of hydrants for fire protection service only and such quantities of water as may be demanded for the purpose of extinguishing fires within the service area. This service shall also include water used for testing equipment and training personnel. For all other purposes, the metered or other rates set forth, or as may be filed with the Public Service Commission, shall apply.

#### Triannual Public Fire Protection Service Charges:

5/8 -inch meter - \$	16.28	3 -inch meter - \$	244.00
3/4 -inch meter - \$	16.28	4 -inch meter - \$	407.00
1 -inch meter - \$	40.60	6 -inch meter - \$	814.00
1 1/4 -inch meter - \$	60.20	8 -inch meter - \$	1,302.00
1 1/2 -inch meter - \$	81.40	10 -inch meter - \$	1,953.00
2 -inch meter - \$	130.20	12 -inch meter - \$	2,604.00

Customers who are provided service under Schedules Mg-1, Ug-1, Mgt-1, or Mz-1, shall also be subject to the charges in this schedule.

Billing: Same as Schedule Mg-1.

#### Private Fire Protection Service - Unmetered - - - Upf-1

This service shall consist of permanent or continuous unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes, and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow prevention devices.

#### Triannual Private Fire Protection Service Demand Charges:

2-inch or smaller connection	\$ 20.80
3-inch connection	\$ 39.00
4-inch connection	\$ 65.00
6-inch connection	\$ 130.00
8-inch connection	\$ 208.00

10-inch connection	\$ 312.00
12-inch connection	\$ 416.00
14-inch connection	\$ 520.00
16-inch connection	\$ 624.00

Billing: Same as Schedule Mg-1.

General Service - Metered - - - Mg-1

Triannual Service Charges:

$\frac{5}{8}$ -inch meter - \$	23.00	3 -inch meter - \$	150.00
$\frac{3}{4}$ -inch meter - \$	23.00	4 -inch meter - \$	220.00
1 -inch meter - \$	36.00	6 -inch meter - \$	370.00
1 $\frac{1}{4}$ -inch meter - \$	49.00	8 -inch meter - \$	540.00
1 $\frac{1}{2}$ -inch meter - \$	62.00	10 -inch meter - \$	740.00
2 -inch meter - \$	96.00	12 -inch meter - \$	940.00

Plus Volume Charge:

\$1.65 per 100 cubic feet of water used triannually

Billing: Bills for water service are rendered triannually and become due and payable upon issuance following the period for which service is rendered. A late payment charge of 1 percent per month will be added to bills not paid within 20 days of issuance. This late payment charge will be applied to the total unpaid balance for utility service, including unpaid late payment charges. This late payment charge is applicable to all customers. The utility customer may be given a written notice that the bill is overdue no sooner than 20 days after the bill is issued. Unless payment or satisfactory arrangement for payment is made within the next 10 days, service may be disconnected pursuant to Wis. Admin. Code ch. PSC 185.

Combined Metering: Volumetric meter readings will be combined for billing if the utility for its own convenience places more than one meter on a single water service lateral. Multiple meters placed for the purpose of identifying water not discharged into the sanitary sewer are not considered for utility convenience and shall not be combined for billing. This requirement does not preclude the utility from combining readings where metering configurations support such an approach. Meter readings from individually metered separate service laterals shall not be combined for billing purposes.

Other Charges - - - OC-1

Non-Sufficient Funds Charge: A \$30.00 charge shall apply to the customer's account when a check rendered for utility service is returned for non-sufficient funds. This charge may not be in



addition to, but may be inclusive of, other non-sufficient funds charges when the check was for payment of multiple services.

Billing: Same as Schedule Mg-1.

Public Service - - - Mpa-1

Water service supplied to municipal buildings, schools, sewer treatment plants, etc., shall be metered and the regular metered service rates (Schedule Mg-1) applied.

Water used on an intermittent basis for flushing sewers, street sprinkling, flooding skating rinks, drinking fountains, etc., shall be metered where meters can be set to measure the service. Where it is impossible to measure the service, the superintendent shall estimate the volume of water used based on the pressure, size of opening, and period of time water is allowed to be drawn. The estimated quantity used shall be billed at the rate of \$1.65 per 100 cubic feet.

Billing: Same as Schedule Mg-1.

General Water Service - Unmetered - - - Ug-1

Where the utility cannot immediately install its water meter, service may be supplied temporarily on an unmetered basis. Such service shall be billed at the rate of \$62.60 triannually. This rate shall be applied only to single-family residential and small commercial customers and approximates the cost of 2,400 cubic feet of water triannually under Schedule Mg-1. If it is determined by the utility that usage is in excess of 2,400 cubic feet of water triannually, an additional charge per Schedule Mg-1 will be made for the estimated additional usage.

Billing: Same as Schedule Mg-1.

Seasonal, Emergency, or Temporary Service - - - Mgt-1

Seasonal customers\* shall pay an annual seasonal service charge equal to three times the applicable service charge in Schedule Mg-1. Water use in any billing period shall be billed at the applicable volume rates in Schedule Mg-1 and the charge added to the annual seasonal service charge.

In addition, customers who have an additional meter pursuant to Schedule Am-1 shall also pay an annual seasonal rental charge equal to three times the applicable additional meter rental charge in Schedule Am-1.

For disconnections of service not previously considered as seasonal, emergency, or temporary, if service is resumed at the same premises by the same customer within a 12-month period, and if

there has been no service to another customer during the intervening period, the customer shall be billed for the pro rata share of the applicable service charge for the period of disconnection.

Further, if service has been disconnected or a meter removed, a charge under Schedule R-1 shall be applied at the time of reconnection or meter reinstallation.

\*Seasonal customers are general service customers whose use of water is normally for recurring periods of less than a year. This includes service under Schedule Mg-1 and/or Schedule Am-1.

Billing: Same as Schedule Mg-1.

#### Building and Construction Water Service - - - Mz-1

For single-family and small commercial buildings, apply the unmetered rate (Schedule Ug-1).

For large commercial, industrial, or multiple apartment buildings, a temporary metered installation shall be made and general metered rates (Schedule Mg-1) applied.

Billing: Same as Schedule Mg-1.

#### Bulk Water - - - BW-1

All bulk water supplied from the water system through hydrants or other connections shall be metered, or at the direction of the utility, estimated. Utility personnel or a utility-approved party shall supervise the delivery of water.

Bulk water sales are:

- A. Water supplied by tank trucks or from hydrants for the purpose of extinguishing fires outside the utility's immediate service area;
- B. Water supplied by tank trucks or from hydrants for purposes other than extinguishing fires, such as irrigation or the filling of swimming pools; or,
- C. Water supplied from hydrants or other temporary connections for general service type applications. (Water supplied for construction purposes - see Schedule Mz-1.)

A charge for the volume of water used will be billed to the party using the water at \$1.65 per 100 cubic feet. A service charge, in addition to the volumetric charge, will be \$25.00. In addition, for meters that are assigned to bulk water customers for more than 30 days, the applicable service charge in Schedule Mg-1 will apply after the first 30 days.

The water utility may require reasonable deposits for the temporary use of its equipment under this and other rate schedules. The deposit(s) collected will be refunded upon return of the utility's equipment. Damaged or lost equipment will be repaired or replaced at the customer's expense.

Billing: Same as Schedule Mg-1.

#### Additional Meter Rental Charge - - - Am-1

If a customer requests the installation of an additional meter\* to receive credit for clear water not discharged into the sanitary sewer system, or if a sewerage service customer who is not a customer of the water utility requests the installation of a meter to determine the volume of sewage discharged into the sanitary sewer system, the utility shall furnish and install this additional meter. This rate applies to single-family residential and small commercial customers. At utility discretion, it may also be applied to other customers. A rental fee shall be charged for the use of this meter and the following rates shall apply.

$\frac{5}{8}$ -inch meter -	\$ 9.20 triannually
$\frac{3}{4}$ -inch meter -	\$ 9.20 triannually
1 -inch meter -	\$ 14.40 triannually
1 $\frac{1}{4}$ -inch meter -	\$ 19.60 triannually
1 $\frac{1}{2}$ -inch meter -	\$ 24.80 triannually
2 -inch meter -	\$ 38.40 triannually

Initial Meter Installation Charge - \$40.00

\*For the Schedule Am-1 rate to apply, the additional meter must be installed on the same service lateral as the primary meter. Also, if the metering configuration is in the Addition Method, the Schedule Am-1 rate will apply only if the additional meter is  $\frac{3}{4}$ -inch or less. If the additional meter is larger than  $\frac{3}{4}$ -inch in the Addition Method, then Schedule Mg-1 rates apply to the primary meter and the additional meter as separate accounts.

Billing: Same as Schedule Mg-1.

#### Reconnection Charges - - - R-1

	<u>During Normal Business Hours</u>	<u>After Normal Business Hours</u>
Reinstallation of meter, including valving at curb stop	\$ 40.00	\$ 55.00
Valve turned on at curb stop	\$ 25.00	\$ 35.00

Administrative charges for site collection of delinquent arrears by service person upon arrival at customer's property to disconnect service	\$ 10.00	\$ 15.00
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Note: No charge for disconnection.

Billing: Same as Schedule Mg-1.

#### Water Lateral Installation Charge - - - Cz-1

Subdivision developers shall be responsible, where the main extension has been approved by the utility, for the water service lateral installation costs from the main through the curb stop and box.

When the cost of a utility main extension is to be collected through assessment by the municipality, the actual average water lateral installation costs from the main through the curb stop and box shall be included in the assessment of the appropriate properties.

The initial water service lateral(s), not installed as part of a subdivision development or an assessable utility extension, will be installed from the main through the curb stop and box by the utility, for which the actual cost will be charged.

Billing: Same as Schedule Mg-1.

#### Rules and Regulations - - - X-1

Delete Schedule X-1 (10 pages). Incorporate the operating rules for municipal water utilities as provided by the Public Service Commission.

#### Water Main Extension Rule - - - X-2

Water mains will be extended for new customers on the following basis:

- A. Where the cost of the extension is to immediately be collected through assessment by the municipality against the abutting property, the procedure set forth under Wis. Stat. § 66.0703 will apply, and no additional customer contribution to the utility will be required.
- B. Where the municipality is unwilling or unable to make a special assessment, the extension will be made on a customer-financed basis as follows:

1. The applicant(s) will advance as a contribution in aid of construction the total amount equivalent to that which would have been assessed for all property under A.
  2. Part of the contribution required in B.1. will be refundable. When additional customers are connected to the extended main within 10 years of the date of completion, contributions in aid of construction will be collected equal to the amount which would have been assessed under A. for the abutting property being served. This amount will be refunded to the original contributor(s). In no case will the contributions received from additional customers exceed the proportionate amount which would have been required under A., nor will it exceed the total assessable cost of the original extension.
- C. When a customer connects to a transmission main or connecting loop installed at utility expense within 10 years of the date of completion, there will be a contribution required of an amount equivalent to that which would have been assessed under A.

Water Main Installations in Platted Subdivisions - - - X-3

Application for installation of water mains in regularly platted real estate development subdivisions shall be filed with the utility.

If the developer, or a contractor employed by the developer, is to install the water mains (with the approval of the utility), the developer shall be responsible for the total cost of construction.

If the utility or its contractor is to install the water mains, the developer shall be required to advance to the utility, prior to the beginning of the construction, the total estimated cost of the extension. If the final costs exceed estimated costs, an additional billing will be made for the balance of the cost due. This balance is to be paid within 30 days. If final costs are less than estimated, a refund of the overpayment will be made by the water utility.

**VILLAGE OF WHITEFISH BAY WATER UTILITY**  
**Customer Water Bill Comparison at Present and Proposed Rates**

Customer Type	Meter Size (Inches)	Volume 100 Cu. Ft.	Triannual		Percent Change	Triannual Bills With Fire		
			Bill at Old Rates	Bill at New Rates		Bill at Old Rates	Bill at New Rates	Percent Change
Small Residential	5/8	10	\$ 27.87	\$ 39.50	42%	\$ 40.23	\$ 55.78	39%
Average Residential	3/4	24	\$ 44.39	\$ 62.60	41%	\$ 56.75	\$ 78.88	39%
Large Residential	3/4	75	\$ 104.57	\$ 146.75	40%	\$ 116.93	\$ 163.03	39%
Commercial	3/4	100	\$ 134.07	\$ 188.00	40%	\$ 146.43	\$ 204.28	40%
Commercial	1	150	\$ 202.80	\$ 283.50	40%	\$ 234.01	\$ 324.10	38%
Commercial	1	200	\$ 261.80	\$ 366.00	40%	\$ 293.01	\$ 406.60	39%
Commercial	1 1/2	300	\$ 396.49	\$ 557.00	40%	\$ 459.68	\$ 638.40	39%
Public Authority	6	400	\$ 765.55	\$ 1,030.00	35%	\$ 1,386.64	\$ 1,844.00	33%
Public Authority	3	500	\$ 698.15	\$ 975.00	40%	\$ 884.48	\$ 1,219.00	38%
Commercial	2	600	\$ 774.90	\$ 1,086.00	40%	\$ 876.87	\$ 1,216.20	39%
Public Authority	4	800	\$ 1,106.23	\$ 1,540.00	39%	\$ 1,418.32	\$ 1,947.00	37%
Large Commercial	3	1,200	\$ 1,524.15	\$ 2,130.00	40%	\$ 1,710.48	\$ 2,374.00	39%
Large Public Authority	6	1,700	\$ 2,299.55	\$ 3,175.00	38%	\$ 2,920.64	\$ 3,989.00	37%
Large Commercial	6	3,400	\$ 4,305.55	\$ 5,980.00	39%	\$ 4,926.64	\$ 6,794.00	38%
Large Commercial	3	8,000	\$ 9,548.15	\$ 13,350.00	40%	\$ 9,734.48	\$ 13,594.00	40%